Ecological Reference Worksheet*

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Contact for lead author:_Phil Smith_____ Reference site used? No

Date:_24 October 2002_____MLRA: 42 Ecological Site:_Salt Flats___ Applies to All (write year or AAll@)

Indicators. For each indicator, describe the potential for the site. Where possible, (1) use numbers, (2) include expected range for poor B good production year and (3) cite data. Continue descriptions on a separate sheet.	**ERA Match?**
1. Number and extent of rills: There should not be any rills on this site.	
2. Presence of water flow patterns: There should not be any water flow patterns on this site because it is too flat.	
3. Number and height of erosional pedestals or terracettes: There should not be any pedestals or terracettes associated with erosion.	
4. Bare ground from Ecological Site Description or other studies: Bare ground can make up to 60% of the ground cover on this site according to the ESD. Bare patch size should be very small.	
5. Number of gullies and erosion associated with gullies: There should not be any gullies or erosion associated with gullies on this site.	
6. Extent of wind scoured, blowouts and/or depositional areas: There should not be any wind scoured, blowouts and/or depositional areas.	
7. Amount of litter movement (describe size and distance expected to travel): There should not be any litter movement on this site because it is too flat. Wind could move very small sized litter very short distances.	
8. Soil surface (top few mm) resistance to erosion (stability values are averages B most sites will show a range of values): Soil surface stability values can be low, however, there should not be large amounts of erosion because this site is too flat.	
9. Soil surface structure and SOM content (include type and strength of structure, and A-horizon color and thickness): For the Hondale Series in Luna County, this loam should have an A horizon 0-5 inches thick. It has a weak thin platy parting to moderate fine granular structure and should be light reddish brown (5YR 6/3 dry) to dark reddish gray (5YR 4/2 moist). The SOM content should be less than 1%.	
10. Effect of plant community composition (relative proportion of different functional groups) & spatial distribution on infiltration & runoff: The infiltration can be slow and there should not be any runoff. Infiltration rates should be highest at bases of plants due to their roots and the soil building processes. Soils are too high in clay content to allow rapid infiltration away from plant bases.	
11. Presence and thickness of compaction layer (usually none; describe soil profile features which may be mistaken for compaction on this site): There should not be compaction layers on this site.	
12. Functional/Structural Groups (list in order of descending dominance by above-ground weight using symbols: >>, >, = to indicate much greater than, greater than, and equal to): Spai >> Other Atriplex spp.> fourwing saltbush = vine mesquite = bunch grasses = forbs = short grasses > other forbs = other shrubs = other grasses	
13. Amount of plant mortality and decadence (include which functional groups are expected to show mortality or decadence): Alkali sacaton can show decadence in plant centers. During prolonged drought, plains bristlegrass can disappear. The site is generally resilient to dry conditions. There should not be as much mortality even during drought when compared to other sites. Forbs can show the greatest amount of mortality.	
14. Expected litter amount: Average 15% **cover and** 2.0 **inch deep.** (As per ESD)	
15. Expected annual production (this is TOTAL above-ground production, not just forage production): The annual production in years with unfavorable precipitation should be approximately 400 lbs/acre and 1,100 lbs/acre in years with favorable precipitation according to the ESD. In highly favorable years or following natural fire with adequate precipitation the maximum can easily be exceeded.	
16. Potential invasive (including noxious) species (native and non-native). List species which characterize degraded states and which, after a threshold is crossed, Awill continue to increase regardless of the management of the site@ and may eventually dominate the site: Mesquite can be an invader of the site.	
17. Perennial plant reproductive capability: Alkali sacaton should be highly capable of reproducing vegetatively and highly incapable of reproducing by seed. Most of the other species readily reproduce with adequate precipitation.	

*This sheet can also be used to describe Ecological Reference Areas (ERA=s). For ERA=s, you must also complete the following page and describe status of each indicator. In the far right column, write AYes@ (ERA matches expected for site) or ANo@ (ERA does not match expected for the site). Where the answer is ANo@, explain difference in comments.